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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/847,993	05/04/2001	Abdullah A. Al-Eidan	P66599US0	7601	
7:	7590 08/12/2004			EXAMINER	
JACOBSON HOLMAN PROFESSIONAL LIMITED LIABILITY COMPANY 400 SEVENTH STREET, N.W. WASHINGTON, DC 20004			WARE, CICELY Q		
			ART UNIT	PAPER NUMBER	
			2634		
			DATE MAILED: 08/12/2004	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
_	09/847,993	AL-EIDAN, ABDULLAH A.			
Office Action Summary	Examiner	Art Unit			
·	Cicely Ware	2634			
The MAILING DATE of this communication app					
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply by within the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS for cause the application to become ABANDC	e timely filed  days will be considered timely.  rom the mailing date of this communication.  NED (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on 04 M	ay 2001.				
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.	•			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ⊠ Claim(s) 1-32 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-27 and 29-32 is/are rejected. 7) ⊠ Claim(s) 28 is/are objected to. 8) □ Claim(s) are subject to restriction and/o	wn from consideration.				
Application Papers					
9) The specification is objected to by the Examiner.					
10)⊠ The drawing(s) filed on <u>04 May 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1)   Notice of References Cited (PTO-892)  2)   Notice of Draftsperson's Patent Drawing Review (PTO-948)  3)   Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 1.	4) Interview Summ Paper No(s)/Ma 5) Notice of Inform 6) Other:				

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#### **DETAILED ACTION**

### Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### Claim Objections

- 2. Claims 10 and 26 are objected to because of the following informalities:
  - a. Claim 10, line 13, examiner suggests applicant delete second period.
- b. Claim 26, line 13, examiner suggests applicant delete second period.
   Appropriate correction is required.

#### **Double Patenting**

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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4. Claims 1-15, 17-27, 29-32 are rejected under the judicially created doctrine of double patenting over claims 1-14 of U. S. Patent No. 6,205,184 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

(1) With regard to claim 1, the subject matter claimed in claim 1 of the instant application is fully disclosed in the patent claim 1 and is covered by the patent since the patent and the application are claiming common subject matter, as follows: examiner asserts that the applicant's patent inherently encompasses the instant application.

The instant application recites using a small modulation index to suppress the upper and lower sidebands. Applicant's patent recites using a small modulation index to create a small or very small frequency deviation. It is well known in the art that in using a small modulation index the upper and lower sidebands are reduced which inherently causes suppression of the frequency deviation.

The instant application recites a modulation index not greater than 0.2. This limitation is encompassed in applicant's patent for a modulation index of not greater than 1. Not greater than 1 includes values from 0 to 1. Not greater than 0.2 includes values from 0 to 0.2. It is inherent that the values from 0 to 1 include values of 0 to 0.2.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application, which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

(2) With regard to claim 2, claim 2 of the instant application recites all the limitations of claim 2 of applicant's patent.

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- (3) With regard to claim 3, claim 3 of the instant application recites all the limitations of claim 3 of applicant's patent.
- (4) With regard to claim 4, the subject matter claimed in claim 4 of the instant application is fully disclosed in the patent claim 4 and is covered by the patent since the patent and the application are claiming common subject matter, as follows: examiner asserts that the applicant's patent inherently encompasses the instant application.

The instant application recites using a small modulation index to suppress the upper and lower sidebands. Applicant's patent recites using a small modulation index to create a small or very small frequency deviation. It is well known in the art that in using a small modulation index the upper and lower sidebands are reduced which inherently causes suppression of the frequency deviation.

- (5) With regard to claim 5, claim 5 of the instant application recites all the limitations of claim 5 of applicant's patent.
- (6) With regard to claim 6, the subject matter claimed in claim 6 of the instant application is fully disclosed in the patent claim 6 and is covered by the patent since the patent and the application are claiming common subject matter, as follows: examiner asserts that the applicant's patent inherently encompasses the instant application.

The instant application recites using a small modulation index to suppress the upper and lower sidebands. Applicant's patent recites using a small modulation index to create a small or very small frequency deviation. It is well known in the art that in using a small modulation index the upper and lower sidebands are reduced which inherently causes suppression of the frequency deviation.

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(7) With regard to claim 7, claim 7 of the instant application recites all the limitations of claim 7 of applicant's patent.

(8) With regard to claim 8, the subject matter claimed in claim 8 of the instant application is fully disclosed in the patent claim 8 and is covered by the patent since the patent and the application are claiming common subject matter, as follows: examiner asserts that the applicant's patent inherently encompasses the instant application.

The instant application recites using a small modulation index to suppress the upper and lower sidebands. Applicant's patent recites using a small modulation index to create a small or very small frequency deviation. It is well known in the art that in using a small modulation index the upper and lower sidebands are reduced which inherently causes suppression of the frequency deviation.

- (9) With regard to claim 9, claim 9 of the instant application recites all the limitations of claim 9 of applicant's patent.
- (10) With regard to claim 10, the subject matter claimed in claim 10 of the instant application is fully disclosed in the patent claim 10 and is covered by the patent since the patent and the application are claiming common subject matter, as follows: examiner asserts that the applicant's patent inherently encompasses the instant application.

The instant application recites using a small modulation index to suppress the upper and lower sidebands. Applicant's patent recites using a small modulation index to create a small or very small frequency deviation. It is well known in the art that in using

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a small modulation index the upper and lower sidebands are reduced which inherently causes suppression of the frequency deviation.

- (11) With regard to claim 11, of the instant application recites all the limitations of claim 11 of applicant's patent.
- (12) With regard to claim 12, of the instant application recites all the limitations of claim 12 of applicant's patent.
- (13) With regard to claim 13, of the instant application recites all the limitations of claim 13 of applicant's patent.
- (14) With regard to claim 14, of the instant application recites all the limitations of claim 14 of applicant's patent.
- (15) With regard to claim 15, the subject matter claimed in claim 15 of the instant application is fully disclosed in the patent claim 1 and is covered by the patent since the patent and the application are claiming common subject matter, as follows: examiner asserts that the applicant's patent inherently encompasses the instant application.

The instant application recites using a small modulation index to suppress the upper and lower sidebands. Applicant's patent recites using a small modulation index to create a small or very small frequency deviation. It is well known in the art that in using a small modulation index the upper and lower sidebands are reduced which inherently causes suppression of the frequency deviation.

The instant application recites a modulation index not greater than 0.2. This limitation is encompassed in applicant's patent for a modulation index of not greater

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than 1. Not greater than 1 includes values from 0 to 1. Not greater than 0.2 includes values from 0 to 0.2. It is inherent that the values from 0 to 1 include values of 0 to 0.2.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application, which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

(16) With regard to claim 17, the subject matter claimed in claim 17 of the instant application is fully disclosed in the patent claim 1 and is covered by the patent since the patent and the application are claiming common subject matter, as follows: examiner asserts that the applicant's patent inherently encompasses the instant application.

The instant application recites using a small modulation index to suppress the upper and lower sidebands. Applicant's patent recites using a small modulation index to create a small or very small frequency deviation. It is well known in the art that in using a small modulation index the upper and lower sidebands are reduced which inherently causes suppression of the frequency deviation.

The instant application recites a modulation index not greater than 0.2. This limitation is encompassed in applicant's patent for a modulation index of not greater than 1. Not greater than 1 includes values from 0 to 1. Not greater than 0.2 includes values from 0 to 0.2. It is inherent that the values from 0 to 1 include values of 0 to 0.2.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of

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the application, which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

- (17) With regard to claim 18, of the instant application recites all the limitations of claim 2 of applicant's patent.
- (18) With regard to claim 19, of the instant application recites all the limitations of claim 3 of applicant's patent.
- (19) With regard to claim 20, the subject matter claimed in claim 20 of the instant application is fully disclosed in the patent claim 4 and is covered by the patent since the patent and the application are claiming common subject matter, as follows: examiner asserts that the applicant's patent inherently encompasses the instant application.

The instant application recites using a small modulation index to suppress the upper and lower sidebands. Applicant's patent recites using a small modulation index to create a small or very small frequency deviation. It is well known in the art that in using a small modulation index the upper and lower sidebands are reduced which inherently causes suppression of the frequency deviation.

- (20) With regard to claim 21, claim 21 of the instant application recites all the limitations of claim 5 of applicant's patent.
- (21) With regard to claim 22, claim 22 of the instant application recites all the limitations of claim 6 of applicant's patent.
- (22) With regard to claim 23, claim 23 of the instant application recites all the limitations of claim 7 of applicant's patent.

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(23) With regard to claim 24, the subject matter claimed in claim 24 of the instant application is fully disclosed in the patent claim 8 and is covered by the patent since the patent and the application are claiming common subject matter, as follows: examiner asserts that the applicant's patent inherently encompasses the instant application.

The instant application recites using a small modulation index to suppress the upper and lower sidebands. Applicant's patent recites using a small modulation index to create a small or very small frequency deviation. It is well known in the art that in using a small modulation index the upper and lower sidebands are reduced which inherently causes suppression of the frequency deviation.

- (24) With regard to claim 25, claim 25 of the instant application recites all the limitations of claim 9 of applicant's patent.
- (25) With regard to claim 26, the subject matter claimed in claim 26 of the instant application is fully disclosed in the patent claim 10 and is covered by the patent since the patent and the application are claiming common subject matter, as follows: examiner asserts that the applicant's patent inherently encompasses the instant application.

The instant application recites using a small modulation index to suppress the upper and lower sidebands. Applicant's patent recites using a small modulation index to create a small or very small frequency deviation. It is well known in the art that in using a small modulation index the upper and lower sidebands are reduced which inherently causes suppression of the frequency deviation.

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(26) With regard to claim 27 of the instant application recites all the limitations of claim 11 of applicant's patent.

- (27) With regard to claim 29 of the instant application recites all the limitations of claim 13 of applicant's patent.
- (28) With regard to claim 30 of the instant application recites all the limitations of claim 14 of applicant's patent.
- (29) With regard to claim 31, the subject matter claimed in claim 31 of the instant application is fully disclosed in the patent claim 1 and is covered by the patent since the patent and the application are claiming common subject matter, as follows: examiner asserts that the applicant's patent inherently encompasses the instant application.

The instant application recites using a small modulation index to suppress the upper and lower sidebands. Applicant's patent recites using a small modulation index to create a small or very small frequency deviation. It is well known in the art that in using a small modulation index the upper and lower sidebands are reduced which inherently causes suppression of the frequency deviation.

The instant application recites a modulation index not greater than 0.2. This limitation is encompassed in applicant's patent for a modulation index of not greater than 1. Not greater than 1 includes values from 0 to 1. Not greater than 0.2 includes values from 0 to 0.2. It is inherent that the values from 0 to 1 include values of 0 to 0.2.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of

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the application, which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 16 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Patent (US Patent 6,205,184) as applied to claim 15 and 31, in view of Sakamoto (US Patent 5,200,835).
- (1) With regard to claim 16, claim 16 inherits all the limitations of claim 15.
  However Applicant's Patent does not disclose suppressing includes a bandpass filter.

However Sakamoto discloses suppressing includes a bandpass filter (abstract, col. 1, lines 54-59, col. 3, lines 3-7, 25-28, col. 6, lines 19-24).

Therefore it would have been obvious to one of ordinary skill in the art to modify Applicant's Patent to incorporate suppressing using a bandpass filter in order for the equivalent modulation figure to be lowered and a margin for distortion of the modulated signals is increased, making it possible to achieve a favorable demodulation (Sakamoto, col. 6, lines 33-36).

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(2) With regard to claim 32, claim 32 inherits all the limitations of claims 31 and 16.

#### Allowable Subject Matter

7. Claim 28 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

- 8. The prior art made record of and not relied upon is considered pertinent to applicant's disclosure:
- a. Iwamura et al. US Patent 5,260,838 discloses a magnetic reproducing apparatus for reproducing a video signal from a magnetic recording medium.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cicely Ware whose telephone number is 703-305-8326. The examiner can normally be reached on Monday – Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Cicely Ware

cqw July 29, 2004

> STEPHEN CHIN SUPERVISORY PATENT EXAMINED TECHNOLOGY CENTER 2800